# 2008

## ECONOMIC IMPACT ANALYSIS



Wright-Patterson
Air Force Base

Dayton, Ohio

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#### **PREFACE**

#### Commander's Foreword

Wright-Patterson is one of the largest Air Base Wings in the Air Force with nearly 26,000 employees and 68 tenant units. The 88th Air Base Wing (ABW) is the host organization and is 5,000 combat Airmen strong. All Wright-Patt Airmen — military, civilian and contractor — play a key role in defending our nation's freedom, everywhere from down-range to right here in the Miami Valley. My vision for the 88 ABW is "Combat Airmen—Supporting, Fighting, Winning" and I see Wright Patterson fulfilling three basic roles as a Warfighting Platform, Community Partner, and Economic Engine.



As a Warfighting Platform we deploy more than 1,000 Airmen annually to all corners of the world where they perform

everything from humanitarian aid to combat operations in the air and on the ground. They are highly trained, professional and eager to fight and win! The different organizations here also provide critical advanced research, acquisition, intelligence and staff support to our warfighters and I am very proud of each and every one of them.

While we may be situated behind a fence, we work hard to make that fence as invisible as possible. We are blessed to have such great community support by all sorts of organizations. Whether it's being honored at a Dayton Dragons baseball game, or welcoming home our troops at a Heroes Welcoming Heroes event, the Miami Valley shows its support in countless ways. As a good community partner we return the favor by hosting the annual AFMC Tattoo — a free night of entertainment, flyovers and the best fireworks in southwest Ohio. We also host the annual Air Force Marathon every September and we're always looking for new ways to reach out to our community neighbors.

Perhaps the most important piece to many people is our role as an economic engine. There is no recession at Wright-Patterson Air Force Base! This year we will continue to bed down new Base Realignment and Closure missions and will continue the largest Military Construction project since World War II! By 2011, we will have welcomed 1200 new Combat Airmen to our team; but that is only part of the story. We are also aggressively hiring new interns and reaching out to the community with information on how they can become a part of our Air Force family. Last year alone we hired almost 1300 new people in new jobs and we're still growing. We are working to build pools of talented people to be the next Wright-Patt leaders.

Wright-Patt is a great base and this is a great community—the future certainly looks bright!

Commander, 88th Air Base Wing

#### **Comptroller's Foreword**

The Economic Impact Analysis for Wright-Patterson AFB is prepared annually by the 88th Comptroller Squadron, Financial Analysis Flight (88th CPTS/FMA), with support from the USAF Financial Management Center of Expertise. Launching from the birthplace of air power, Wright-Patterson is a commanding Warfighter Platform aimed squarely toward the defense of our nation's freedom. Our Airmen deliver America's next generation air and space vehicles, while continuously deploying around the globe. They perform heroically in combat environments, valiantly deliver humanitarian aid, and stand resolute in partnership with our surrounding communities. In support of Wright-Patterson's mission, the Comptroller delivers Professional Resource Managers Performing in an Expeditionary Environment providing World-Class Customer Service.



This document captures the 2008 economic and personal impact of Wright-Patterson with the surrounding communities. Our team of professionals collected data from numerous Department of Defense (DoD) agencies, other federal agencies, and private sector sources. Despite a turbulent economic period, Wright-Patterson continues to flourish increasing our economic impact from 2007. With the new BRAC missions, influx of stimulus funds from the American Recovery and Reinvestment Act, and MILCON projects, Wright-Patterson looks forward to a vibrant, energizing 2009.

DERON L. WENDT, COLONEL, USAF

Comptroller, 88th Comptroller Squadron

#### **Wright-Patterson's Heritage**

Wright-Patterson AFB near Dayton, Ohio, traces its origin directly from the Wright brothers' pioneering flights in 1904 and 1905 at the Huffman Prairie Flying Field located in the middle of the installation. Its past, present and future are all inextricably linked with the Wright brothers' legacy. Dayton was the Wright brothers' home and Daytonians consider their city the "Birthplace of Aviation". The Wrights' early years, their bicycle shops, their printing business, and their early aviation efforts are evident throughout the greater Dayton area. Just off the end of Wright-Patterson's active runway, a replica of the Wright brothers' 1905 hangar overlooks the Huffman Prairie Flying Field. Here they established their first flying field, developed the first practical airplane, and in their own words, "really learned to fly". The Flying Field has been designated a National Historic Landmark and is part of the Dayton Aviation Heritage National Historical Park.

The installation itself has been a leader in military aviation since World War I. Aviation research and development began to flourish at Wright-Patterson when the U.S. entered World War I. Wilbur Wright Field was established in the summer of 1917 as a pilot training school at the site of Wright-Patterson's present flight line. In the fall of 1917, McCook Field was established as an Air Service engineering center. McCook Field was located near downtown Dayton at what is now the intersection of State Route 4 and Interstate 75. In 1927, a new aerodrome and research complex were constructed on land donated by the citizens of Dayton to replace the overcrowded McCook Field. Named Wright Field in honor of both brothers, it is now part of Area B.

Wright-Patterson's logistics heritage also dates from World War I. The Fairfield Aviation General Supply Depot was established in 1917 adjacent to Wilbur Wright Field. The Fairfield Air Depot, as it became known, was a major Army Air Corps depot through the end of World War II. In 1931, the area encompassing the Fairfield Air Depot, Wilbur Wright Field, and the Huffman Prairie Flying Field, was renamed Patterson Field in honor of Lt. Frank Stuart Patterson who died in 1918 when his DH-4 crashed on the airfield during a flight test.

In 1948, Wright and Patterson Fields merged to create Wright-Patterson AFB. The 88th ABW has been the host organization most of the period since the merger. It also provides base operating support for the installation.

Wright-Patterson is one of the largest, most diverse, and organizationally complex bases in the Air Force. Its missions range from acquisition and logistics management, to research and development, education, flight operations, and an assortment of other defense and non-defense activities. Wright-Patterson is home to the Air Force Materiel Command (AFMC), the Aeronautical Systems Center (ASC), the Air Force Research Laboratory (AFRL), the Air Force Security Assistance Center (AFSAC), the Air Force Institute of Technology (AFIT), the National Air and Space Intelligence Center (NASIC), the National Museum of the United States Air Force

(NMUSAF), the 445th Airlift Wing (AW), a regional DoD medical center, and numerous other Air Force, DoD, and government agencies. Bringing it all together is the 88th ABW, which operates, maintains and defends the installation.

Today, as in the first century of flight, the nation's aeronautical weapon systems are conceived, tested, modified, and acquired at Wright-Patterson AFB. The installation's legendary heritage spurs modern aerospace scientists and logisticians in their quest to keep man flying higher, faster, farther, and safer than ever before. The installation also serves as an aerial port of embarkation and plays a continuing role in Overseas Contingency Operations, to include OPERATION ENDURING FREEDOM, NOBLE EAGLE, and OPERATION IRAQI FREEDOM.

The excellent community spirit and cooperation of the installation and its personnel is another hallmark of Wright-Patterson's heritage. Base personnel contribute hundreds of volunteer hours to community projects. They support the annual Vectren Dayton Air Show, offer special events at the NMUSAF, host the Air Force Marathon, conduct education outreach programs, and work with the Dayton Aviation Heritage National Historical Park to enhance the Miami Valley's legacy as the Birthplace of Aviation.

The creativity and professionalism of our Airmen and civilian employees combined with the vitality of the Miami Valley's citizens continue to make Wright-Patterson AFB the birthplace, home, and future of aerospace.

## **ECONOMIC IMPACT TABLES**

#### Table 1

## Personnel by Classification and Housing Location

CLASSIFICATION	LIVING ON BASE	LIVING OFF BASE	TOTAL
1. APPROPRIATED FUND MILITARY			
Active Duty	1,414	5,284	6,698
ANG/Reserve/ART	0	414	414
Non-Extended Active Duty ANG/Reserve	3	1,585	1,588
TOTAL:	1,417	7,283	8,700

2. ACTIVE DUTY MILITARY DEPENDENTS			
TOTAL:	2,665	13,538	16,203

3. APPROPRIATED FUND CIVILIANS	
General Schedule (GS) and General Government (GG)	6,004
National Security Personnel System (NSPS)	2,265
Federal Wage Board	511
Other ( SES, Scientific and Professional Positions)	1,419
TOTAL:	10,199

4. NON-APPROPRIATED FUND CONTRACT CIVILIANS AND PRIVATE BUSINESS	
Civilian Non-Appropriated Funds (NAF)	683
Civilian Army Air Force Exchange Service (AAFES) Base Exchange (BX)	250
Contract Civilians (not elsewhere included)	5,801
Private Businesses On Base, By Type:	80
Branch Banks/Credit Union	24
Office Runway (Cincinnati Association for the Blind)	9
Hope Hotel	40
National Aviation Hall of Fame	7
TOTAL:	6,814

TOTAL ASSIGNED PERSONNEL: 25,713

Table 2 Annual Payroll by Classification and Housing Location

CLASSIFICATION	LIV	ING ON BASE (\$)	LI	VING OFF BASE (\$)	TOTAL (\$)
1. APPROPRIATED FUND MILITARY (APFM)					
Active Duty	\$	96,745,205	\$	361,107,696	\$ 457,852,901
ANG/Reserve/ART	\$	-	\$	32,543,000	\$ 32,543,000
Non-Extended Active Duty ANG/Reserve	\$	205,259	\$	24,978,130	\$ 25,183,389
TOTAL:	\$	96,950,464	\$	418,628,826	\$ 515,579,290

2. APPROPRIATED FUND CIVILIANS	
General Schedule (GS) and General Government (GG)	\$ 427,911,219
National Security Personnel System (NSPS)	\$ 213,562,089
Federal Wage Board	\$ 27,417,778
Other (SES, Scientific and Professional Positions)	\$ 155,606,503
TOTAL:	\$ 824,497,589

3. NON-APPROPRIATED FUND CONTRACT CIVILIANS AND PRIVATE BUSINESS	
Civilian Non-Appropriated Funds (NAF)	\$ 15,125,762
Civilian Army Air Force Exchange Service (AAFES) Base Exchange (BX)	\$ 3,165,006
Contract Civilians (not elsewhere included)	\$ 407,032,966
Private Businesses On Base, By Type:	\$ 5,479,932
Branch Banks/Credit Union	\$ 1,106,674
Office Runway (Cincinnati Association for the Blind)	\$ 228,725
Hope Hotel	\$ 3,808,280
National Aviation Hall of Fame	\$ 336,253
TOTAL:	\$ 430,803,666

TOTAL ANNUAL PAYROLL: \$ 1,770,880,545

Table 3 Expenditures for Construction, Services, and Procurement of Materials, Equipment, and Supplies

CLASSIFICATION		ACTUAL ANNUAL EXPENDITURES		
1. CONSTRUCTION				
Military Construction Program		\$	299,781,177	
Non-Appropriated Fund (NAF)		\$	110,618	
Military Family Housing (MFH)		\$	3,639,333	
Operations & Maintenance (O&M)		\$	53,141,254	
	TOTAL:	\$	356,672,382	

2. SERVICES	
Services Contracts	\$ 433,640,995
Research Development Test & Evaluation	
(RDT&E) Contracts	\$ 373,602,423
Other Services (not elsewhere included)	\$ 44,877,666
TOTAL:	\$ 852,121,084

3. MATERIALS, EQUIPMENT, AND SUPPLIES PROCUREMENT				
Base Exchange (BX)	\$	500,000		
Health (Tri-Care, Government cost only)	\$	29,296,113		
Education (Impact aid and tuition assistance)	\$	4,668,215		
TDY (Military and civilian)	\$	18,929,939		
Government Purchase Card (GPC)/Other				
Materials, Equipment & Supplies				
(not elsewhere included)	\$	203,003,595		
TOTAL:	\$	256,397,862		

TOTAL ANNUAL EXPENDITURES: \$ 1,465,191,328

**Table 4** Estimate of Number and Dollar Value of Indirect Jobs Created

TYPE OF PERSONNEL	NUMBER OF BASE JOBS	MULTIPLIER	NUMBER OF INDIRECT JOBS
ACTIVE DUTY MILITARY	6,698	0.41	2,746
RESERVE/ANG	2,002	0.41	821
APF CIVILIANS	10,199	1.57	16,012
OTHER CIVILIANS	6,814	1.57	10,698
TOTAL:	25,713		30,277

ESTIMATED NUMBER OF INDIRECT JOBS CREATED: 30,277

AVERAGE ANNUAL PAY FOR THE LOCAL COMMUNITY: \$39,840

ESTIMATED ANNUAL DOLLAR VALUE OF JOBS CREATED: \$1,206,235,680

#### **DATA SOURCES:**

Multiplier: LMI Economic Impact Database, Installations and Indirect/Induced Job Multipliers, Feb 95 Avg Annual Pay: Current tables for Average Annual Pay Levels in Metropolitan Areas and Average Annual Pay by city/state are accessible at: www.bls.gov/oes/current/oes\_23020.htm#b00-0000

Table 5 **Total Annual Economic Impact Statement** 

ANNUAL PAYROLL:	\$ 1,770,880,545
Military	\$ 515,579,290
Federal Civilian	\$ 824,497,589
Other Civilian	\$ 430,803,666

ANNUAL EXPENDITURES: \$ 1,465,191,328
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ESTIMATED ANNUAL DOLLAR VALUE OF JOBS CREATED:	\$ 1,206,235,680
Estimated Indirect Jobs Created	30,277
Average Annual Pay	\$ 39,840

TOTAL ECONOMIC IMPACT: \$4,442,307,553

#### **APPENDICES**

#### **Analysis Methodology**

The objective of this Economic Impact Analysis is to quantify Wright-Patterson AFB's local economic activity within fiscal year 2008 (FY08). FY08 covers the time period of October 1, 2007 – September 30, 2008. The local area is defined by the U.S Office of Management and Budget and is called a Metropolitan Statistical Area (MSA). The definition of Wright-Patterson AFB's MSA has varied throughout past analyses, but remained the same between FY07 and FY08. The MSA consists of five surrounding counties: Clark, Greene, Miami, Montgomery and Preble. The MSA is illustrated in Figure 1 below.

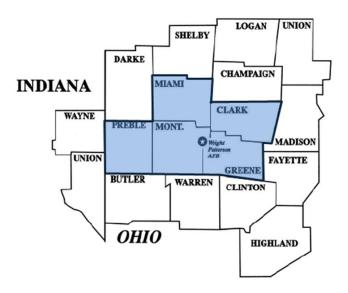


Figure 1: Economic Area for Wright-Patterson AFB

#### **Table 1: Personnel by Classification and Housing Location**

The headcount of military personnel living on base was derived from a Defense Joint Military Pay System (DJMS) report furnished by the 88th CPTS. The Air National Guard and Reserve numbers were collected from the 445th AW and various other base tenants. The number of military personnel and dependents living on base was provided by the 88th ABW Civil Engineering Office for Housing (88th ABW/CEH). The number of off base dependants was calculated based upon an average ratio of active duty personnel to dependants. Civilian headcount was collected from the Civilian Personnel Flight (88th MSS/DPCXC) and various tenant organizations. Contract civilian headcount was derived from the 88th MSS/MO Tenant Report.

#### Table 2: Annual Payroll by Classification and Housing Location

The payroll of military personnel living on base was derived from a DJMS report furnished by the 88th CPTS. The Air National Guard and Reserve payroll was collected from the 445th AW and various other base tenants. The majority of the appropriated fund civilian input was provided by the 88th MSS office. Various base tenants and the Defense Acquisition University (DAU), which is a new input to this year's analysis, also furnished civilian payroll data. The payroll for civilian contractors was calculated by multiplying the headcount from the 88th MSS/MO Tenant Report by an average contractor cost derived from various Wright-Patterson AFB service contracts.

#### Table 3: Expenditures for Construction, Services, and Procurement

Military construction spending was collected from the 88th ABW/CE, the 445th AW and the US Army Corp of Engineers (USACoE). The 88th ABW/CE office was the only base organization with either NAF or MFH spending in FY08. The 88th Contracting Squadron (88th CONS) was the only organization with O&M Construction spending. The amount for Services Contracts was calculated by adding input from the 88th CONS, 445th AW, ASC/PK, and ASC/AQZP office then subtracting the Contract Civilian payroll from section 3 of table 2. This ensured service contracts were not double-counted. RDT&E data was provided by AFRL/PK and ASC/AQZP. Other Services consists of input from the 88th CONS. Education spending was a combination of the Education and Training Flight and Federal Government Impact Aid. Data for the GPC and Other spending came from the 445th AW, 88th CONS, ASC/AQZP, and ASC/PK.

#### Table 4: Estimate of Number and Dollar Value of Indirect Jobs Created

The multipliers in this table were taken from the Economic Impact Database owned by the Logistics Management Institute. The average annual pay was taken from the Bureau of Labor and Statistics website. This methodology is required according to Chapter 4 of AFMAN 65-506.

#### **Table 5: Total Annual Economic Impact Estimate**

This table is simply a summary of Tables 1 - 4. Wright-Patterson AFB's total economic impact upon the Dayton MSA is 4,442,307,553.

#### Summary

This Economic Impact Analysis was prepared by the 88th CPTS/FMA, Wright-Patterson AFB, with assistance from the Financial Management Center of Expertise, Denver, Colorado. Questions or comments concerning the statistics or data contained in this analysis may be addressed to Mr. Kevin Leverson (303-676-8159, kevin.leverson@buckley.af.mil) or Mr. Ken Charles, (937-257-7763, kenneth.charles@wpafb.af.mil).

## **Summary of Capital Assets**

## **CAPITAL ASSETS**

(As of: 30 September 2008)

Building Category	Square Feet	
Housing		
(Includes detached garages and storage buildings)	859,901	
Community		
(Includes commissary, BX, BAQ, VAQ/VOQ, and recreation)	2,506,619	
Research and Development	4,862,663	
Hospital	825,533	
All Other Buildings		
(Includes Operations & Training, Supply, Maintenance & Production, and		
Administration)	6,413,088	
Other Structures and Facilities	976,336	
Utilities and Ground Improvement	243,353	
TOTAL:	16,687,493	

Dormitory/Temporary Quarters	Number of Units	Bed Capacity
Airman/NCO	5	500
Visiting Officer/Airman Quarters	8	422
Temporary Lodging Facilities	46	144
Compassionate Care Facilities	16	32
TOTAL:	75	1,098

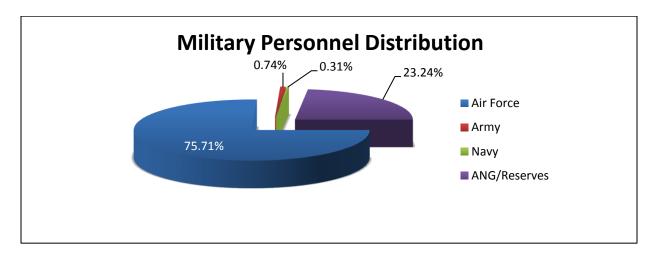
Land	Acres
Fee Owned	7,629
Easements	431
Right of Way	83
Leased	2
TOTAL:	8,145

Runways	Linear Feet
Area A	7,000
Area C	12,600
Area B (inactive)	7,147
TOTAL:	26,747

Facilities Data	Number of Buildings/Units
Buildings	529
Family Housing Units	1,638
TOTAL:	2,167

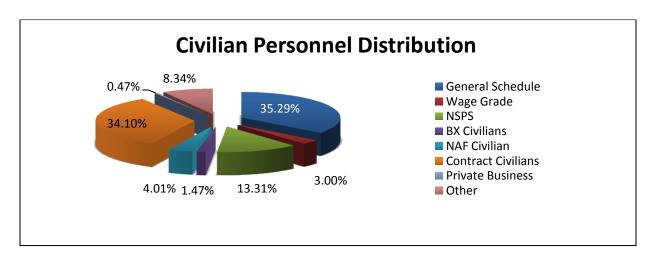
Figure 2: Wright-Patterson AFB's Capital Assets

#### **Personnel Distribution**



Air Force	air Force Army Navy		ANG/Reserves	
6,522	64	27	2,002	

Figure 3: Distribution of Military Personnel by Branch of Service



General Schedule	Wage Grade	NSPS	BX Civilians	NAF Civilian	Contract Civilians	Private Business	Other
6,004	511	2,265	250	683	5,801	80	1,419

Figure 4: Distribution of Civilians by Personnel System

## Military & Civilian Payroll and Assignment Trends

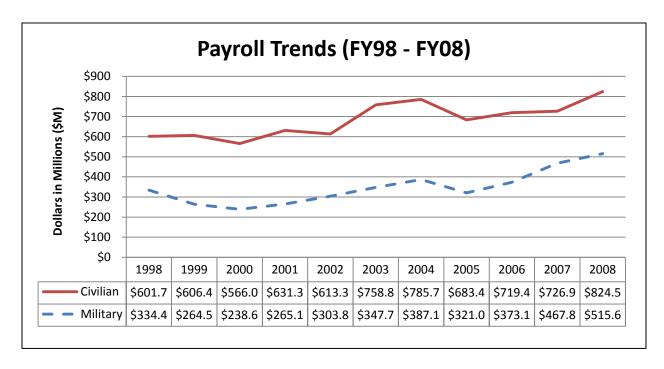


Figure 5: Total Military & Civilian Annual Payroll

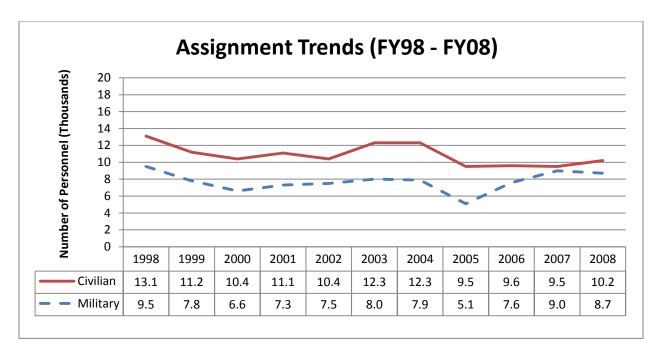
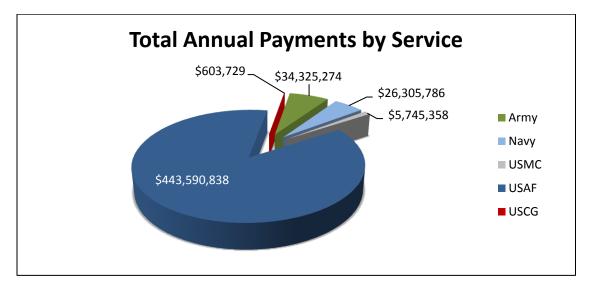


Figure 6: Total Military & Civilian Personnel Assigned

#### **Military Retiree Payments**



Service	Army	Navy	USMC	USAF	USCG
Number of Recipients	2,051	1,328	296	16,065	34
Annual Disbursement Amount	\$ 34,325,274	\$ 26,305,786	\$ 5,745,358	\$443,590,838	\$ 603,729

Figure 7: Total Military Retiree Payments by Branch of Service

### **Combined Federal Campaign Contributions**

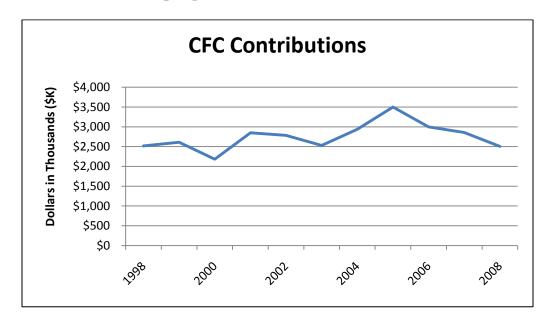


Figure 8: Total CFC Contributions from Wright-Patterson AFB

## **Summary of Impact Aid Payments**

IMPACT AID SUMMARY					
School District	County	Amount			
Mad River Local	Montgomery	\$	944,099		
Fairborn City	Greene	\$	378,705		
Beavercreek Local	Greene	\$	124,442		
Greenon Local	Clark	\$	9,016		
Huber Heights City	Montgomery	\$	=		
Mad River-Green Local	Clark	\$	=		
Dayton City	Montgomery	\$	=		
Centerville City	Montgomery	\$ -			
Kettering City	Montgomery	\$	=		
Springfield City	Clark	\$	=		
Xenia City	Greene	\$	-		
Tecumseh Local	Clark	\$	=		
Miamisburg City	Montgomery	\$	=		
Oakwood City	Montgomery	\$	=		
West Carrollton	Montgomery	\$	=		
Yellow Springs	Greene	\$	=		
TOI	\$	1,456,262			

Figure 9: Summary of Dayton, OH Impact Aid Payments